

needles that had none, and fired dry gunpowder by the electric spark. I have five bottles that contain 8 or 9 gallons each, two of which charg'd, are sufficient for those purposes; but I can charge and discharge them all together. There are no bounds (but what expence and labour give) to the force man may raise and use in the electrical way: For bottle may be added to bottle in infinitum, and all united and discharged together as one, the force and effect proportioned to their number and size. The greatest known effects of common lightening, may, I think, without much difficulty be exceeded in this way, which a few years since could not have been believed, and even now may seem to many a little extravagant to suppose.—So we are got beyond the skill of *Rabelais's* devils of two years old, who, he humourously says, had only learnt to thunder and lighten a little round the head of a cabbage.

*I am, with sincere respect,*

*Your most obliged humble servant,*

B. FRANKLIN.

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*Queries and Answers, referr'd to in the foregoing Letter.*

*Query.* Wherein consists the difference between an electric and a non-electric body?

*Answer.* The terms electric *per se*, and non-electric were first used to distinguish bodies, on a mistaken supposition that those called electrics *per se* alone contain'd electric matter in their substance, which was capable of being excited by friction, and of being produced or drawn from them and communicated to those called non-electrics, supposed to be destitute of it: For the glass, &c. being rubbed, discover'd signs of having it, by snapping to the finger, attracting, repelling, &c. and could communicate those signs to metals and water.—Afterwards it was found, that rubbing of glass would not produce the electric matter, unless a communication was preserved between the rubber and the floor; and subsequent experiments prov'd that the electric matter was really drawn from those bodies that at first were thought to have none in them. Then it was doubted whether glass and other bodies called *electrics per se* had really any electric matter in them, since they apparently afforded none but what they first extracted from those which had been called non-electrics. But some of my experiments shew that glass contains it in great quantity, and I now suspect it to be pretty equally diffused in all the matter of this terraqueous globe.